

# Rowan J Smith

## List of Publications by Year in Descending Order

**Source:** <https://exaly.com/author-pdf/2787438/rowan-j-smith-publications-by-year.pdf>

**Version:** 2024-04-28

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

59  
papers

2,487  
citations

27  
h-index

49  
g-index

64  
ext. papers

2,847  
ext. citations

5  
avg, IF

5.05  
L-index

#	Paper	IF	Citations
59	The Magnetic Field in the Milky Way Filamentary Bone G47. <i>Astrophysical Journal Letters</i> , <b>2022</b> , 926, L6	7.9	
58	Is the molecular KS relationship universal down to low metallicities?. <i>Monthly Notices of the Royal Astronomical Society</i> , <b>2022</b> , 510, 4146-4165	4.3	0
57	s3game v3: Gas Fragmentation in Postprocessing of Cosmological Simulations for More Accurate Infrared Line Emission Modeling. <i>Astrophysical Journal</i> , <b>2021</b> , 922, 88	4.7	4
56	Dynamically Driven Inflow onto the Galactic Center and its Effect upon Molecular Clouds. <i>Astrophysical Journal</i> , <b>2021</b> , 922, 79	4.7	5
55	The Core Mass Function in the Orion Nebula Cluster Region: What Determines the Final Stellar Masses?. <i>Astrophysical Journal Letters</i> , <b>2021</b> , 910, L6	7.9	3
54	High-resolution CARMA Observation of Molecular Gas in the North America and Pelican Nebulae. <i>Astronomical Journal</i> , <b>2021</b> , 161, 229	4.9	0
53	Simulations of the star-forming molecular gas in an interacting M51-like galaxy: cloud population statistics. <i>Monthly Notices of the Royal Astronomical Society</i> , <b>2021</b> , 505, 5438-5459	4.3	2
52	The CARMA-NRO Orion Survey Data Release. <i>Research Notes of the AAS</i> , <b>2021</b> , 5, 55	0.8	0
51	The CARMA-NRO Orion Survey: Filament Formation via Collision-induced Magnetic Reconnection in the Stick in Orion A. <i>Astrophysical Journal</i> , <b>2021</b> , 906, 80	4.7	2
50	Simulations of the Milky Way Central Molecular Zone III. Star formation. <i>Monthly Notices of the Royal Astronomical Society</i> , <b>2020</b> , 497, 5024-5040	4.3	27
49	Simulations of the star-forming molecular gas in an interacting M51-like galaxy. <i>Monthly Notices of the Royal Astronomical Society</i> , <b>2020</b> , 492, 2973-2995	4.3	31
48	A SOFIA Survey of [C ii] in the Galaxy M51. II. [C ii] and CO Kinematics across the Spiral Arms. <i>Astrophysical Journal</i> , <b>2020</b> , 900, 132	4.7	2
47	Gravity and Rotation Drag the Magnetic Field in High-mass Star Formation. <i>Astrophysical Journal</i> , <b>2020</b> , 904, 168	4.7	3
46	The history of dynamics and stellar feedback revealed by the H I filamentary structure in the disk of the Milky Way. <i>Astronomy and Astrophysics</i> , <b>2020</b> , 642, A163	5.1	8
45	Simulations of the Milky Way central molecular zone II. Gas dynamics. <i>Monthly Notices of the Royal Astronomical Society</i> , <b>2020</b> , 499, 4455-4478	4.3	25
44	The Cloud Factory II: gravoturbulent kinematics of resolved molecular clouds in a galactic potential. <i>Monthly Notices of the Royal Astronomical Society</i> , <b>2020</b> , 500, 5268-5296	4.3	2
43	The Cloud Factory I: Generating resolved filamentary molecular clouds from galactic-scale forces. <i>Monthly Notices of the Royal Astronomical Society</i> , <b>2020</b> , 492, 1594-1613	4.3	28

42	The CARMA-NRO Orion Survey. <i>Astronomy and Astrophysics</i> , <b>2019</b> , 623, A142	5.1	25
41	The geometry of the gas surrounding the Central Molecular Zone: on the origin of localized molecular clouds with extreme velocity dispersions. <i>Monthly Notices of the Royal Astronomical Society</i> , <b>2019</b> , 488, 4663-4673	4.3	17
40	The CARMA-NRO Orion Survey: Core Emergence and Kinematics in the Orion A Cloud. <i>Astrophysical Journal</i> , <b>2019</b> , 882, 45	4.7	5
39	Strong Excess Faraday Rotation on the Inside of the Sagittarius Spiral Arm. <i>Astrophysical Journal Letters</i> , <b>2019</b> , 887, L7	7.9	13
38	Synthetic Large-scale Galactic Filaments: On Their Formation, Physical Properties, and Resemblance to Observations. <i>Astrophysical Journal</i> , <b>2019</b> , 887, 186	4.7	5
37	A theoretical explanation for the Central Molecular Zone asymmetry. <i>Monthly Notices of the Royal Astronomical Society</i> , <b>2018</b> , 475, 2383-2402	4.3	49
36	A SOFIA Survey of [C ii] in the Galaxy M51. I. [C ii] as a Tracer of Star Formation. <i>Astrophysical Journal Letters</i> , <b>2018</b> , 869, L30	7.9	10
35	Massive 70 M <sub>⊙</sub> quiet clumps II. Non-thermal motions driven by gravity in massive star formation?. <i>Monthly Notices of the Royal Astronomical Society</i> , <b>2018</b> , 473, 4975-4985	4.3	30
34	The CARMA-NRO Orion Survey. <i>Astrophysical Journal, Supplement Series</i> , <b>2018</b> , 236, 25	8	44
33	Thermal Feedback in the High-mass Star- and Cluster-forming Region W51. <i>Astrophysical Journal</i> , <b>2017</b> , 842, 92	4.7	28
32	Simultaneous low- and high-mass star formation in a massive protocluster: ALMA observations of G11.920.61?. <i>Monthly Notices of the Royal Astronomical Society</i> , <b>2017</b> , 468, 3694-3708	4.3	35
31	THE ROLE OF COSMIC-RAY PRESSURE IN ACCELERATING GALACTIC OUTFLOWS. <i>Astrophysical Journal Letters</i> , <b>2016</b> , 827, L29	7.9	82
30	CO-dark gas and molecular filaments in Milky Way-type galaxies III. The temperature distribution of the gas. <i>Monthly Notices of the Royal Astronomical Society</i> , <b>2016</b> , 462, 3011-3025	4.3	28
29	On the nature of star-forming filaments III. Subfilaments and velocities. <i>Monthly Notices of the Royal Astronomical Society</i> , <b>2016</b> , 455, 3640-3655	4.3	80
28	Kinematic and thermal structure at the onset of high-mass star formation - ISOSS23053. <i>Proceedings of the International Astronomical Union</i> , <b>2015</b> , 12, 125-126	0.1	
27	CO-dark gas and molecular filaments in Milky Way-type galaxies. <i>Monthly Notices of the Royal Astronomical Society</i> , <b>2014</b> , 441, 1628-1645	4.3	123
26	On the nature of star-forming filaments II. Filament morphologies. <i>Monthly Notices of the Royal Astronomical Society</i> , <b>2014</b> , 445, 2900-2917	4.3	116
25	THE BONES OF THE MILKY WAY. <i>Astrophysical Journal</i> , <b>2014</b> , 797, 53	4.7	81

24	Low-metallicity star formation: relative impact of metals and magnetic fields. <i>Monthly Notices of the Royal Astronomical Society</i> , <b>2014</b> , 442, 3112-3126	4.3	16
23	Line profiles of cores within clusters III. What is the most reliable tracer of core collapse in dense clusters?. <i>Monthly Notices of the Royal Astronomical Society</i> , <b>2014</b> , 444, 874-886	4.3	19
22	The Birth of an IMF. <i>Thirty Years of Astronomical Discovery With UKIRT</i> , <b>2014</b> , 323-327	0.3	
21	Spiral Shocks, Cooling, and the Origin of Star Formation Rates. <i>Thirty Years of Astronomical Discovery With UKIRT</i> , <b>2014</b> , 151-155	0.3	
20	Shocks, cooling and the origin of star formation rates in spiral galaxies. <i>Monthly Notices of the Royal Astronomical Society</i> , <b>2013</b> , 430, 1790-1800	4.3	49
19	LINE PROFILES OF CORES WITHIN CLUSTERS. II. SIGNATURES OF DYNAMICAL COLLAPSE DURING HIGH-MASS STAR FORMATION. <i>Astrophysical Journal</i> , <b>2013</b> , 771, 24	4.7	49
18	The structure and kinematics of dense gas in NGC 2068. <i>Monthly Notices of the Royal Astronomical Society</i> , <b>2013</b> , 429, 3252-3265	4.3	5
17	Variable accretion rates and fluffy first stars. <i>Monthly Notices of the Royal Astronomical Society</i> , <b>2012</b> , 424, 457-463	4.3	43
16	Formation and evolution of primordial protostellar systems. <i>Monthly Notices of the Royal Astronomical Society</i> , <b>2012</b> , 424, 399-415	4.3	239
15	LINE PROFILES OF CORES WITHIN CLUSTERS. I. THE ANATOMY OF A FILAMENT. <i>Astrophysical Journal</i> , <b>2012</b> , 750, 64	4.7	41
14	THE IMPACT OF THERMODYNAMICS ON GRAVITATIONAL COLLAPSE: FILAMENT FORMATION AND MAGNETIC FIELD AMPLIFICATION. <i>Astrophysical Journal Letters</i> , <b>2012</b> , 760, L28	7.9	27
13	Formation and evolution of primordial protostellar systems <b>2012</b> ,		3
12	WEAKLY INTERACTING MASSIVE PARTICLE DARK MATTER AND FIRST STARS: SUPPRESSION OF FRAGMENTATION IN PRIMORDIAL STAR FORMATION. <i>Astrophysical Journal</i> , <b>2012</b> , 761, 154	4.7	28
11	The formation and fragmentation of disks around primordial protostars. <i>Science</i> , <b>2011</b> , 331, 1040-2	33.3	280
10	The fragmentation of expanding shells III. Oligarchic accretion and the mass spectrum of fragments. <i>Monthly Notices of the Royal Astronomical Society</i> , <b>2011</b> , 411, 2230-2240	4.3	9
9	The efficiency of star formation in clustered and distributed regions. <i>Monthly Notices of the Royal Astronomical Society</i> , <b>2011</b> , 410, 2339-2346	4.3	90
8	A quantification of the non-spherical geometry and accretion of collapsing cores. <i>Monthly Notices of the Royal Astronomical Society</i> , <b>2011</b> , 411, 1354-1366	4.3	29
7	The effects of accretion luminosity upon fragmentation in the early universe. <i>Monthly Notices of the Royal Astronomical Society</i> , <b>2011</b> , 414, 3633-3644	4.3	88

6	SIMULATIONS ON A MOVING MESH: THE CLUSTERED FORMATION OF POPULATION III PROTOSTARS. <i>Astrophysical Journal</i> , <b>2011</b> , 737, 75	4-7	324
5	The Formation of Massive Stars. <i>Proceedings of the International Astronomical Union</i> , <b>2010</b> , 6, 57-64	0-1	
4	The Effects of Accretion Luminosity on the Environment of the First Stars <b>2010</b> ,		1
3	Fragmentation in molecular clouds and its connection to the IMF. <i>Monthly Notices of the Royal Astronomical Society</i> , <b>2009</b> , 396, 830-841	4-3	61
2	The simultaneous formation of massive stars and stellar clusters. <i>Monthly Notices of the Royal Astronomical Society</i> , <b>2009</b> , 400, 1775-1784	4-3	123
1	The structure of molecular clouds and the universality of the clump mass function. <i>Monthly Notices of the Royal Astronomical Society</i> , <b>2008</b> , 391, 1091-1099	4-3	47